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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,714	03/19/2004	John Larry Sanders	30621-DIV2-CIP1	2713

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EXAMINER	
PEZZUTO, HELEN LEE	
ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/708,714	SANDERS ET AL.	
	Examiner	Art Unit	
	Helen L. Pezzuto	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *1-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-25* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/4/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group III, claims 15-25 in the reply filed on 3/9/05 is acknowledged.

2. Claims 1-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/9/05.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 2/4/05 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because part of the Y axis on Figs. 1 and 2 appeared to be cut off. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in

reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

In claim 15, the parenthetical expression following "consisting of nothing" is improper and should be removed. Does the phase "consisting of nothing" have the same meaning as "a single bond". Please clarify.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

What are the metes and bounds of "said polymer being applied at a rate of at least 5ppm"? The examiner fails to find the precise definition of said "rate" in applicants' disclosure.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 15-16, 19-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (US-629).

US 3,265,629 to Jensen et al. discloses a method of coating solid particles, including fertilizers (col. 2, lines 36-42); col. 11, Example 7). Prior art discloses particle size range which meets the requirement expressed in claim 23 (col. 2, lines 5-12). Suitable coating employed include aqueous solution of polymers containing both lipophilic and hydrophilic units, with the major percentage of the recurring units being hydrophilic (i.e. derived from dicarboxylic acids such as maleic acid and crotonic acid). Thus, water solubility is expected to be substantial as prior art uses aqueous solution of the polymer coating. Other copolymerized units are also taught, in minor amounts (col. 5, lines 57-72). The instant substantially water-

soluble dicarboxylic acid polymer is suggested because prior art teaches a major amount of the hydrophilic recurring units. In a preferred embodiment, the reference teaches hydrolyzed styrene-maleic anhydride copolymer containing a miner amount of other comonomer such as itaconic acid, which encompass the instantly recited "at least two different moieties". Prior art further suggest experimental control of the resultant polymer solubility via inclusion of suitable solubilizing agent (col. 6, lines 13-37). Accordingly, it would have been obvious to adjust the polymer solubility as taught. Prior art appears to be silent regarding the proportions of polymer and fertilizer as expressed in claim 24. The examiner is of the position that under prior art general conditions, one skilled in the art would have envisaged the proper proportions suitable for specific applications via routine experimentation. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Thus, rendering obvious the instant claims.

9. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders et al. (US-831 or US-155).

The applied reference has a common assignee and at least one common inventors with the instant application. Based upon

the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

U.S. 6,596,831 and U.S. 6,525,155 B2 to Sander et al. discloses anionic vinyl/dicarboxylic acid polymers and their utilities, comprising recurring polymeric subunits made up of a combination of at least two different subunit moieties derived from A, B, C moieties. US-382 essentially disclose mixing,

coating, and co-grounding the instant polymer containing B and C recurring subunits with various fertilizer particle species, with the exception of the extra A moiety. Since the instant invention does not exclude the presence of additional moieties, it would have been obvious and fully within the purview of one skilled in the art to omit prior art A moiety with the consequent loss of its function.

Double Patenting

10. Claims 15-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,525,155. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are generic to and encompass those in the reference.

11. Claims 15-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-15,17-19, and 22-23 of U.S. Patent No. 6,518,382. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are generic to and encompass those in US-382.

12. Claims 15-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9, 11, 25-33 of copending Application No. 10/708,653. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant composition encompasses the fertilizer products in the co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 15-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8, 23-30 of copending Application No. 10/708,653. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant fertilizer encompasses the fertilizer species expressed in the co-pending claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple

assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp